

Title (en)

Method and apparatus for automatic discovery of logical links between network devices

Title (de)

Verfahren und Vorrichtung zur automatischen Erkennung von logischen Verbindungen zwischen Netzvorrichtungen

Title (fr)

Méthode et dispositif pour la découverte automatique de liens logiques entre des dispositifs de réseau

Publication

EP 1322068 B1 20061122 (EN)

Application

EP 02293123 A 20021217

Priority

US 2912301 A 20011219

Abstract (en)

[origin: EP1322068A2] The present invention comprises a method and apparatus for automatic discovery of logical links between network devices. In one embodiment, the present invention comprises part of a network management system ("NM") that manages a discrete set of network devices. The NM sends SNMP queries to individual network devices managed by the NM to obtain interface configuration data for each of the network interfaces of the device. The information requested includes destination information ("next hop" or "neighbor" IP address) for data packets sent from the interface. The NM checks to see whether a logical link corresponding to the received configuration information already exists in a logical link database maintained by the NM. If such a link exists the NM checks to see if the existing information for the link is valid. If the existing link data is valid, no change is made. If the existing information is not valid, or if no corresponding link is found in the link database, the NM creates a new link corresponding to the new configuration information. In one or more embodiments, the NM displays a graphical view of the discovered IP links on a graphical network map.

IPC 8 full level

H04L 45/02 (2022.01)

CPC (source: EP US)

H04L 41/0213 (2013.01 - EP US); **H04L 41/12** (2013.01 - US); **H04L 45/02** (2013.01 - EP US); **H04L 45/26** (2013.01 - EP US); **H04L 45/48** (2013.01 - US)

Cited by

EP1560379A1; FR2938992A1; US7292541B1; US9961144B2; US7877456B2; US7631052B2; WO2010058144A1; US7430584B1; WO2006042983A1; US7844695B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

EP 1322068 A2 20030625; **EP 1322068 A3 20040616**; **EP 1322068 B1 20061122**; AT E346437 T1 20061215; DE 60216221 D1 20070104; DE 60216221 T2 20080103; US 2003112764 A1 20030619; US 8040869 B2 20111018

DOCDB simple family (application)

EP 02293123 A 20021217; AT 02293123 T 20021217; DE 60216221 T 20021217; US 2912301 A 20011219